

DISPLAYS

FAQ

Q What does aspect ratio mean?

A The aspect ratio describes the proportion, or shape, of the display. A typical widescreen LCD TV has a 16:9 aspect ratio. The first number refers to the width and the second the height. Non-widescreen TVs usually have an aspect ratio of 4:3. This is also expressed as 1.33:1, because $4 \div 3 = 1.33$. 16:9 is also 1.78:1.

DVD movies tend to have a wider aspect than 1.78:1, with most favouring a 2.35:1 ratio. This means that you'll see black bars at the top and bottom of a 16:9 display. Most displays can make any video fit the screen area entirely, but this is done either by zooming in and cropping the left and right portions off or by stretching it vertically, which makes everything look unnatural.

Lynley Oram

Features editor and displays expert

lynley@computershopper.co.uk

LG Flatron L226WTQ

★★★★★

£182 inc VAT

From www.microdirect.co.uk

LG's Flatron L226WTQ is a 22in widescreen monitor with a 1,680x1,050 native resolution. It has a thin 13mm silver bezel at the top and sides and a glossy black stand. The display swivels and tilts, but doesn't pivot and isn't height adjustable.

The L226WTQ's most remarkable specification is the 5,000:1 contrast ratio, which LG proudly claims as a UK first. However, this is a digital fine contrast (DFC) ratio, where software analyses the image, optimising the backlight and colour luminance to achieve the high contrast ratio. DFC is switched on only when the monitor is in the preset movie mode.

There are six control buttons under the front of the display. As well as power, auto and source buttons, there's an EZ zoom button and another labelled F-engine. This cycles through the movie, text, normal and user modes. Manual adjustments to brightness and colour can be saved in the user mode.

When you select a new mode, a split-screen preview shows the original image on the left and the enhanced one on the right. Switching to movie mode, which activates DFC, gave our test movie clips a rich, vibrant look without making them oversaturated. Blacks looked deep and dark, while lighter scenes looked bright. Problems arose in scenes where there was strong contrast. For example, when a blue bottlenosed dolphin leapt out of the water against a bright background of sunlit sea, it shimmered black. With DFC switched off, the problem vanished.

We preferred the image quality achieved by adjusting the settings manually. Blacks were black, and

whites pure and bright. Some fine details in darker areas of high contrast weren't picked out, though.

Pressing the EZ zoom button reduces the screen resolution down one setting; press it again and it restores the display to the original resolution. This is aimed people who might have difficulty seeing small text and icons at the display's native resolution. It doesn't make them that much larger, though, and the result is at the expense of clarity – the image looks softened and blurry. Although the monitor has a horizontal viewing angle of 170 degrees, in practice we

found that just moving a little to the side resulted in the screen darkening.

At the rear are DVI and D-sub inputs, and the DVI interface is HDCP compliant. There are no extras such as a USB hub or speakers, though. The L226WTQ is capable of excellent quality, but the DFC is problematic. It's affordable, too, but HannsG's HW223DP (see below) has more features for a similar price.

Lynley Oram



SUMMARY

- ✓ Excellent image quality
- ✓ HDCP-compliant
- ✗ Poor viewing angles

22in WIDESCREEN LCD 1,680x1,050 native resolution, 5,000:1 contrast ratio, 4ms response time (black-to-black), D-sub, DVI
PART CODE L226WTQ-SF
DETAILS <http://uk.lge.com>

Also consider...

IİYAMA ProLite X486S-B1

★★★★★

£189 inc VAT

From www.oyyy.co.uk



The ProLite X486S-B1 screen's glossy coating makes colours look richer, and the 400cd/m² backlight helps overcome unwelcome reflections. It performs beautifully whether you're editing a spreadsheet or playing a game. Images are sharp, colours are vibrant and skin tones realistic. This LCD is excellent value.



19in LCD 1,280x1,024 native resolution, 700:1 contrast ratio, 2ms response time (black-to-black), D-sub, DVI, one-port USB2 hub PART CODE X486SB1
DETAILS www.iyyama.co.uk
FULL REVIEW Feb 2007

HANNSG HW223DP

★★★★★

£184 inc VAT

From www.oyyy.co.uk



The HW223DP's brushed-silver surround and black stand look classy. The display supports HDCP, so it's great for HD video. An included adaptor allows a component video source to connect to the DVI input. It produces a clear, sharp image using both D-sub and DVI inputs, with colours that look rich and natural.



22in WIDESCREEN LCD 1,680x1,050 native resolution, D-sub, DVI, 3.5mm line-in connectors, four-port USB2 hub, 5ms response time, 800:1 contrast ratio
PART CODE HW223DP
DETAILS www.hannsg.co.uk
FULL REVIEW Aug 2007

MIRAI DML-519W100

★★★★★

£123 inc VAT

From www.pixmania-pro.co.uk



Mirai's DML-519W100 displays sharp images and handled our greyscale transition test fairly well, with only a little banding at the lighter end of the gradient. Colours look natural. This is an inexpensive display, but it produces good image quality. It's a great buy if your budget is tight.



19in WIDESCREEN LCD 1,440x900 native resolution, D-sub, DVI, 3.5mm line in connectors, 8ms response time, 500:1 contrast ratio
PART CODE DML-519W100
DETAILS www.mirai.eu
FULL REVIEW Aug 2007

BENQ G2400WA

★★

£230 inc VAT

From www.lambda-tek.com

BenQ's G2400WA is the cheapest 24in widescreen LCD we've seen. Unfortunately, this is reflected in its styling and features. It has a plastic-looking brushed silver surround and a stand that feels flimsy. It isn't height adjustable, and there's no pivot or swivel either. It also has only a D-sub input.

However, if you're looking for an affordable monitor that can display full 1080p high-definition video, none of this may matter. Other monitors manage a crisp display over VGA. However the G2400WA isn't quite up top scratch. The Windows desktop looked a little soft, and text wasn't as sharply defined as we'd like, but these are minor gripes. It excelled in games. We didn't detect any blurring or ghosting no matter how fast-paced the action. You'll need a powerful graphics card to run games at the native resolution of 1,920x1,200, but detail is exquisite.

The analogue input means there's no support for HDCP. If you're editing high-definition video from a camcorder, this won't be a problem. Sadly, we weren't too impressed with the G2400WA's quality when watching our HD test clips. It couldn't retain detail in dark areas, and colours were oversaturated when using the movie mode.

There are four other presets: standard, sRGB, photo and dynamic. However, none of these produced decent image quality. Colours were undersaturated in standard mode, while the photo preset brought out the sharp



definition in pictures with high contrast, but left colours looking unnatural. We were able to improve on this after making our own adjustments, but skin tones still looked a little ruddy.

BenQ quotes viewing angles of 160 degrees horizontally and vertically. This is quite low, and in practice we found it even worse than these figures indicate. Just moving our head slightly away from the middle of the screen resulted in a darkening of the image and a loss of colour. The backlight isn't brilliant, either. Our white-screen test, which fills the display with pure white, appeared bright in the middle, but slightly grey around the edges.

The G2400WA turned out to be exactly what we feared: a 24in, full HD widescreen display that simply cuts too many corners to be good value. If you want to watch 1080p movies and edit your own HD video, we'd recommend that you spend an extra £70 on Samsung's 245B (see 'Also Consider...' below). This has much better image quality, more features and is HDCP-compliant.

Lyndley Oram

SUMMARY

- ✓ Inexpensive
- ✗ Poor image quality
- ✗ No digital interface

24in WIDESCREEN LCD 1,920x1,200 native resolution, 1,000:1 contrast ratio, 5ms (black-to-black) response time, D-sub
PART CODE 9J.0BJ72.A4E
DETAILS www.benq.co.uk

CHOOSING AN... LCD Monitor

Follow the steps to find your ideal specs

IMAGE SIZE: 17in

NATIVE RESOLUTION: 1,280x1,024

INPUTS: VGA

Recommended minimum in grey

1 A basic 17in LCD monitor with the specifications listed above will cost around £95. It will be fine for basic Windows work, but it will have poor viewing angles and colour reproduction won't be very good, so it's not ideal for colour-sensitive work.

2 A VGA input means you'll be able to use the monitor with every PC, but it won't give you as good a picture as with DVI. This digital connection requires a compatible graphics card, but means there are no digital-to-analogue or analogue-to-digital conversions, which reduce the quality of the picture. A DVI connection automatically gets the best picture; you won't have to adjust clock or phase settings as you do with an analogue connection.

3 A 19in monitor will cost around £110 and has the same native resolution as 17in models, but the extra space is easier on the eye. If you want higher resolutions, a 20.1in (from around £190) or larger display will have a native resolution of 1,600x1,200.

A widescreen monitor makes sense if you watch a lot of movies or play games. The budget models come with a resolution of 1,440x900 (from around £110), while the larger, more expensive models have a resolution of 1,680x1,050 (from around £220).

4 If you want a better-quality picture, look for a monitor with high contrast ratios. The higher the ratio, the whiter the whites and the blacker the blacks look. In images with high contrast levels, you'll be able to see finer details.

The viewing angles are important, as wider angles mean you don't have to sit face on to get the best picture. Wider angles also mean that more people can watch your screen, which is useful if you want to show films.

Fast response times cut down on ghosting. Don't be blinded by the numbers, though, as a response time of 25ms or quicker is fine for all applications.

5 Extras such as speakers and a USB hub can be useful, but don't buy solely for them; monitor speakers tend to be poor, while USB hubs cost only a few pounds.

SAMSUNG SyncMaster 245B

★★★★★

£306 inc VAT

From www.lambda-tek.com

BEST BUY Samsung's SyncMaster 245B is a smart-looking 24in widescreen monitor. HD movie clips played beautifully and detail was sharp in even the darkest areas of a scene, with rich, vibrant colours. Colours in our test photos were realistic, with natural skin tones. The DVI interface gives HDCP support for watching protected HD content.

24in WIDESCREEN LCD 1,920x1,200 native resolution, 1,000:1 contrast ratio (2,000:1 dynamic mode), 5ms (grey to grey) response time, D-sub, DVI connectors
PART CODE LS24HUBCBQ
DETAILS www.samsung.com/uk
FULL REVIEW Nov 2007

LG 37LC55

★★★★★

£487 inc VAT

From www.flattelly.co.uk

PRICE CUT!

BEST BUY LG's 37LC55 looks fabulous and has the performance to match. It's great for standard interlaced video sources but comes into its own when handling high-definition (HD) material and progressive scan DVDs. Colours are rich but have a natural appearance. Focus over D-sub and DVI is pin-sharp. This is a great TV at a reasonable price.



37in LCD TV 1,366x768 native resolution, wsub, component, 2x SCART, digital tuner
PART CODE 37LC55 DETAILS www.lge.com
FULL REVIEW Nov 2007

TOSHIBA Regza 32C3030

★★★★★

£479 inc VAT

From www.currys.co.uk

BEST BUY Picture quality from HD footage and our progressive scan DVD was perfect with the 32C3030. Colours were rich and deep, and blacks looked black. This TV puts in a good all-round performance for a very reasonable price.



32in LCD TV 1,366x768 native resolution, 4,000:1 contrast ratio, 2x HDMI, D-sub, component, 2x SCART
PART CODE 32C3030
DETAILS www.toshiba.co.uk
FULL REVIEW Nov 2007